Portrait Of Tuna Commodity Price Determination In Maluku, Case Study In Tial Village, Central Maluku

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Abstract:

Maluku is one of the largest tuna producing provinces in Indonesia. Tuna is a fishery commodity that has high economic value and broad market demand, both at home and abroad. However, tuna commodity prices in Maluku often experience fluctuations which are influenced by various factors, such as quality, size, season, demand, supply, production costs and government policies. The selling price of tuna fish, especially at the fishermen level, to the Company is still very low compared to the Company's selling price to exporters. The research method used is a qualitative method with critical theory. The method for determining the price of tuna commodities that is commonly used in the fishing industry is as follows: First, cost-based pricing, this method determines the price of tuna based on the total costs of production, processing and distribution. The selling price is set by adding the desired profit margin to the total cost. Secondly, Market Based Price Determination. This method determines the price of tuna based on the prevailing market price. The company monitors tuna prices in global and local markets and adjusts their selling prices accordingly. The third is Value Based Pricing. This method determines the price of tuna based on the value perceived by consumers. The company conducts market research to understand what consumers are willing to pay for tuna and sets the selling price based on that value. The results show that the determination of the selling price for tuna fish at the fishermen level is still very low because fishermen do not directly sell the tuna fish they catch to the company but rather through collectors first. And collectors are also looking for bigger profits from them. If the fisherman sells it directly to the company, it is likely that the price will still be better than the purchase price from the tuna fish collector. Even though they know this, the fact is that fishermen still choose to sell their tuna catch to collectors, because for them collectors are people who are very helpful and make it easier for them to immediately sell tuna fish and make money. Sometimes collectors also provide working capital to fishermen and this is a form of remuneration for fishermen's services to collectors so that fishermen are powerless in setting a fair selling price.

Keywords: Price determination, tuna, commodities, Central Maluku, fishermen's welfare, fisheries policy.

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I. Introduction

Maluku Province, which is known for its wealth of marine natural resources, is one of the largest tuna producing areas in Indonesia. Tuna, as one of the leading commodities, has high economic value in both domestic and international markets. In this context,

Tuna prices are often influenced by various factors involving producers, traders and consumers.

Tial Village, located in Central Maluku Regency, has great potential in tuna production. As a coastal village, the residents of Tial Village mostly depend on the fishing sector for their livelihoods, with tuna being one of the main commodities caught. However, even though it has abundant potential, the prices for tuna received by fishermen in this village often do not reflect the true potential of this commodity. This creates an imbalance between production costs and the income earned by fishermen, which in turn affects their welfare.

Factors that influence tuna price determination in Tial Village can vary, ranging from local market conditions, competition between traders, transportation costs, to government policies related to exports and regulations of the fisheries sector. Apart from that, weather and seasonal factors also play an important role in the availability of tuna, which in turn influences price fluctuations in the market.

This case study aims to dig deeper into the mechanism for determining tuna prices in Tial Village, with a focus on factors that influence prices, such as distribution patterns, the role of parties involved in transactions (fishermen, traders, exporters), as well as the influence of policy. government to market prices. This research is expected to provide insight into the dynamics of the tuna market in the Central Maluku region, as well as provide recommendations for improving the welfare of fishermen and the sustainability of the tuna fisheries sector in the area.

II. Literature Review

Perfect Competition Market Theory (Perfect Competition)

In a perfectly competitive market, the selling price of tuna will be influenced by highly competitive market conditions, where there are many producers and consumers. No single company can influence market prices, so the selling price of tuna is determined by the balance between supply and demand in the market.

Characteristics of Perfect Competition Markets:

The There are many sellers and buyers of tuna, no single company has monopoly power.

The Tuna products are considered homogeneous (each tuna fish has similar qualities).

The Market information is perfectly available, which means consumers and producers have the same information.

In these market conditions, tuna selling prices will move based on demand and supply factors, without intervention from producers.

Determination of Fishery Commodity Prices

Determining the price of fishery commodities, such as tuna, is the result of interactions between market factors, production costs and government policies. The price of a commodity is usually determined by the demand and supply prevailing in the market. According to Mankiw (2014), the market price of an item is determined by the balance between the quantity of goods offered and the quantity of goods demanded. In the context of fisheries commodities, this means that the price of tuna on the market will be influenced by the amount of tuna caught and available on the market and how much demand there is from consumers, both domestic and international.

Apart from that, fishermen's production costs also play a role in determining prices. The costs incurred to catch tuna, such as the cost of boat fuel, fishing equipment, and other operational costs, will influence the selling price desired by fishermen. In this case, cost and selling price analysis is very important in determining the profit margin obtained by fishermen (Jansen, 2012).

Tuna Market Dynamics

The tuna market, both at the local and international level, is greatly influenced by market demand, natural conditions, and export-import policies. Tuna has a very large market, both in international markets, such as Japan, the United States and Europe, as well as in the domestic market. Global demand for tuna continues to increase, along with the development of fish processing and consumption industries in various countries.

Apart from market demand, natural factors, such as fishing season and weather conditions, also influence the amount of tuna caught. Erratic fishing seasons can cause fluctuations in the amount of tuna available, which in turn affects market prices. According to Sato et al. (2019), fluctuations in tuna prices are often influenced by unstable catches, which results in uncertainty in the supply of tuna to the market.

Role of Parties Involved in the Distribution Chain

In the tuna distribution system, there are many parties involved, from fishermen, local traders, exporters, to final consumers. Each party has a role in determining the price of tuna on the market. Fishermen, as the first to catch tuna, often receive lower prices due to distribution costs and profit margins that must be obtained by traders and exporters.

According to a study conducted by Agustina (2016), traders and exporters have a big influence in determining prices because they control the supply chain to the wider market, both domestic and international. This causes fishermen to often be in a weaker position in price negotiations, so they often accept prices that are lower than the selling price for tuna in the final market.

Government Policy in the Fisheries Sector

Government policies also influence the determination of tuna commodity prices. The government can establish policies that support or inhibit tuna export and trade activities. Export policies such as restrictions on export quotas, export tariffs and subsidies for fishermen can influence the selling price of tuna in domestic and international markets. For example, policies that reduce exports can increase the supply of tuna in the domestic market, which in turn can reduce prices.

In addition, policies regarding natural resource management, such as regulations on sustainable fish catches and tuna conservation, also have a significant impact on tuna prices. In this case, policies that can support the sustainability of tuna stocks will have a long-term impact on price stability and the sustainability of the fisheries sector (FAO, 2018).

Price Fluctuations and Their Impact on Fishermen's Welfare

Fluctuations in tuna prices have a major impact on fishermen's welfare. Unstable prices can cause fishermen's income to become uncertain, thus hampering their ability to plan their family finances and fishing

activities more effectively. Apart from that, price fluctuations also affect fishermen's purchasing power for their operational needs, such as fishing equipment and boat fuel.

Research by Firdaus et al. (2020) shows that price fluctuations in fisheries commodities, including tuna, often cause income uncertainty for fishermen. This influences their decision to continue or stop fishing activities at certain times. In the long term, price instability can affect the social and economic welfare of fishermen and trigger poverty problems in coastal areas.

Economic Theory of Natural Resources and Sustainable Fisheries Management

To understand the dynamics of tuna prices, natural resource economic theory can be used as a basis. This theory explains how natural resources, such as tuna, are managed and traded to maximize profits in the long term, taking into account resource scarcity. Natural resource economic models underscore the importance of sustainable management to maintain a sustainable supply of tuna to the market.

According to Hardin (1968) in the concept of "Tragedy of the Commons," without good management, natural resources such as tuna could be threatened with exhaustion due to over-exploitation. Therefore, it is important for the government and related parties to establish policies that ensure the continuity of tuna populations and the welfare of fishermen, such as regulations regarding fishing zones, catch quota limits, and protection of tuna species.

Related Research

Several previous studies that are relevant to this topic include Rudianto (2017) who discussed the influence of fluctuations in tuna prices on fishermen's income in Central Maluku Regency. This research shows that fluctuating tuna prices have a direct effect on fishermen's income and increase their economic uncertainty. Apart from that, research by Widianto (2019) also examined the tuna distribution system in the Maluku region and the role of traders in determining the selling price of tuna in the market.

III. Results

The results of this research are that the process of determining tuna prices in Tial Village is based on the interaction between several main factors, namely **supply and demand**, **production cost**, as well as **the role of traders and exporters**. Based on the results of interviews with fishermen, the price of tuna received by fishermen is generally determined through negotiations with local traders. Local traders then determine the selling price to consumers based on the market prices prevailing in big cities such as Ambon or even international markets. Several fishermen informants revealed that they tend to accept prices lower than the selling price for tuna in the final market. This is caused by **fishermen's dependence on traders** And **distribution costs** what traders must pay to market tuna, both for domestic and international markets.

The interview results show that there are several factors that significantly influence the price of tuna in Tial Village:

- 1. **Fluctuations in Number of Catches**: A number of fishermen stated that the tuna catch season greatly influences prices. In seasons where tuna is abundant, prices tend to fall due to abundant supply, while in seasons where catches are scarce, tuna prices can soar due to limited supply.
- 2. **Fisherman Production Costs**: The costs incurred by fishermen to catch tuna, such as the cost of boat fuel, fishing equipment and labor, also influence the selling price they set. In some cases, when market prices are low, fishermen have difficulty covering production costs, leading to them being forced to accept lower prices from collectors.
- 3. **International Market Demand**: One of the main factors influencing the price of tuna in Tial Village is international market demand, especially from countries such as Japan and the United States. The high demand for tuna for sushi and sashimi consumption in the international market encourages exporters to buy tuna in large quantities, which can increase selling prices in the domestic market.
- 4. **Role of Traders and Exporters**: Local traders play an important role in determining tuna prices, as they control local and international market access. In many cases, exporters also influence prices by adjusting their purchasing prices based on global market price movements.

Fluctuations in tuna prices directly affect fishermen's welfare. Based on interviews with several fishermen, fluctuating prices cause income uncertainty. In periods when tuna prices are low, fishermen's income decreases significantly, making it difficult for them to meet their daily needs and operational costs. Several fishermen also revealed that they were often forced to suspend fishing activities or reduce fishing intensity when prices fell sharply, resulting in lost opportunities to earn higher income. This uncertainty also influences fishermen's decision making in the long term, such as the decision to continue fishing or switch to another sector.

The results of interviews with several government officials show that policies implemented in the fisheries sector, such as limiting catch quotas, setting basic prices, and export policies, also influence tuna prices.

Inconsistent or uncoordinated policies can cause price uncertainty and hinder tuna market stability.

However, several policies that support fisheries sustainability, such as tuna stock management and environmental conservation, are believed to have a positive impact on price stability and sustainability of the fisheries sector.

One of the main findings of this research is that there is **inequality in tuna pricing** between fishermen and traders (collectors). Fishermen, as the first to catch tuna, receive relatively lower prices, while local traders (collectors) and exporters gain greater profits. This reflects an imbalance in the distribution chain, where fishermen are often in a weak position to negotiate prices.

This condition shows the dependence of fishermen on local traders (collectors) who act as intermediaries between them and the wider market. Therefore, policies are needed which can strengthen fishermen's bargaining position in price negotiations, such as through the development of fishermen's cooperatives or providing direct access to international markets.

Tuna price fluctuations are strongly influenced by **changes in international market demand**, especially from countries that consume large amounts of tuna, such as Japan and the United States. High demand causes tuna prices to soar, while a decline in global demand can cause prices to drop in local markets. This condition shows that the price of tuna in Tial Village is very dependent on the global market, and fishermen are often the ones who suffer losses due to changes in international market dynamics. In this context, it is important for the government and fishing industry players to create policies that can reduce dependence on international markets and strengthen domestic markets. For example, by increasing awareness of domestic tuna consumption and strengthening the local tuna processing industry.

Sharp tuna price fluctuations cause **economic uncertainty** for fishermen. In the long term, this uncertainty can influence fishermen's investment decisions in fishing businesses, including purchasing more modern fishing equipment or increasing production capacity. Therefore, policies are needed that can ensure tuna price stability, for example by setting a floor price or providing incentives for fishermen to continue operating even though prices are low. Implementing policies that support fishermen's welfare, such as subsidizing ship fuel or reducing operational costs, can also help reduce the impact of price fluctuations on fishermen's income.

The research results show that government policy has an important role in stabilizing tuna prices. However, inappropriate or uncoordinated policies between various agencies can cause instability in the tuna market. Therefore, more integrated policies are needed, such as fisheries management based on sustainability principles, wisely setting export quotas, and increasing domestic market competitiveness.

IV. Conclusion

Determining the price of tuna in Tial Village, Central Maluku, is influenced by a number of interrelated factors, such as fluctuations in tuna supply, production costs and international market demand. Fluctuations in tuna prices have a significant impact on the welfare of fishermen, with price uncertainty can hamper their income. Therefore, policies are needed that better support fishermen, strengthen their bargaining position in distribution, and ensure the sustainability of the fisheries sector to create stable tuna prices.

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